IBM FileNet Process Analyzer

Version 4.5





Installation and Upgrade Guide

IBM FileNet Process Analyzer

Version 4.5





Installation and Upgrade Guide

Note

Before using this information and the product it supports, read the information in "Notices" on page 73.

This edition applies to version 4.5 of IBM FileNet Process Analyzer (product number 5724-R76) and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright International Business Machines Corporation 2001, 2009.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Revision log

The following table identifies changes made to this document since the IBM® FileNet® Process Analyzer 4.5 release.

	Revision
02/09	Added step "Ensure minimum required disk space and temp space for installation" on page 24 for installs and "Ensure minimum required disk space and temp space for installation" on page 56 upgrade procedure.
	Added information about important log files in "Check for errors in the Process Analyzer error log files at:" on page 39 for installs and in "Check for errors in the Process Analyzer error log files at:" on page 62 for upgrades.
12/08	Updated requirements for <i>pa_administrator</i> in "To create users required at runtime" on page 25 and in "Configure the following service to log on as the pa_administrator." on page 43.
11/08	Initial revision of the IBM FileNet Process Analyzer Installation and Upgrade Guide for release 4.5.

Table of Contents

Revision log	5
About this document	9
Intended audience.	9
Typographical conventions	10
Acronyms	11
About IBM FileNet documentation	12
Copy Web documents into the belo system and make them searchable	12
Links to additional information	12
Cathar reference documentation	12
	12
Other available documents	14
Autonomy K2 software documentation for configuring the EileNet D9 Content Search Engine	16
Autonomy K2 sonware documentation compatibility matrices, and fix packs	10
Access Ibin FileNet documentation, compatibility matrices, and fix packs	10
	17
Гееараск	17
Plan and prepare for installation	. 18
Plan the installation	18
Definition of roles	10
	10
IT administrator (ITA)	10
Security administrator (SA)	10
	10
	20
	20
Perform Required Preparation Tasks	. 21
Installation administrator tasks	. 22
Choose Installation Mode	. 22
Plan vour installation	. 22
Cluster installation	22
Process Analyzer installation use cases	22
Process Analyzer limitations	22
Plan for Non-English Environment Installation	22
Language support for process analysis	23
PA installation with multi-lingual Process Engine	23
	23
Plan for additional software requirements	22
IT administrator tasks	23 24
Ensure minimum required dick space and terms appear for installation	24 04
	24
	24
	24
	24

	25
Create Required Users	25
Configure Windows users with administrative privileges on the Online Transaction Analysis I	Pro-
cessing (OLAP) database.	27
Database administrator tasks	28
Prepare for database installation	28
Prepare Microsoft SQL Server	29
Install database drivers on the Process Analyzer Engine server	31
Collect the required database information	32
Prepare Microsoft SQL Server client	33
Install and configure Process Analyzer	34
Task 1: Install Process Analyzer documentation	35
Task 2: Install Process Analyzer Engine	36
Task 3: Install the latest Content Engine Client files on Process Analyzer server	40
Task 4: Install the latest Process Engine Client files on Process Analyzer server	42
Task 5: Configure Process Analyzer Engine	43
Task 6: Install Process Analyzer Client	47
Task 7: Install Process Analyzer software updates.	. 52
Plan and prepare for upgrade	53
Plan the Upgrade	53
Gather auxiliary documentation.	53
	F 0
Supported Upgrade Paths.	53
Supported Upgrade Paths	53
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs.	53 53
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks	53 53 54
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks Installation Administrator Tasks Verify supporting software	53 53 54 55
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks Installation Administrator Tasks Verify supporting software Verify the core platform components support levels	53 53 54 55 55
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks	53 53 55 55 55
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks	53 53 55 55 55 55
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks	53 53 55 55 55 55 55 55
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks Installation Administrator Tasks	53 53 55 55 55 55 55 56 56
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks . Installation Administrator Tasks . Verify supporting software . Verify the core platform components support levels. Verify that your PA version supports upgrades to version 4.5. FileNet P8 Platform Documentation URL. IT Administrator Tasks . Ensure minimum required disk space and temp space for installation. Back up the PA Engine.	53 53 55 55 55 55 55 56 56 56 56
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks . Installation Administrator Tasks . Verify supporting software . Verify the core platform components support levels. Verify that your PA version supports upgrades to version 4.5. FileNet P8 Platform Documentation URL . IT Administrator Tasks . Ensure minimum required disk space and temp space for installation. Back up the PA Engine . Disable scheduled tasks on the PA server .	53 53 55 55 55 55 55 55 56 56 56 56 56
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks	53 53 55 55 55 55 55 56 56 56 56 56 56 56
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks Installation Administrator Tasks Verify supporting software Verify the core platform components support levels. Verify that your PA version supports upgrades to version 4.5. FileNet P8 Platform Documentation URL. IT Administrator Tasks Ensure minimum required disk space and temp space for installation. Back up the PA Engine. Disable scheduled tasks on the PA server. Security Administrator Tasks Database Administrator Tasks	53 53 55 55 55 55 55 56 56 56 56 56 56 57 57
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks Installation Administrator Tasks Verify supporting software Verify the core platform components support levels. Verify that your PA version supports upgrades to version 4.5. FileNet P8 Platform Documentation URL. IT Administrator Tasks Ensure minimum required disk space and temp space for installation. Back up the PA Engine. Disable scheduled tasks on the PA server. Security Administrator Tasks Database Administrator Tasks Verify Oracle listener	53 53 55 55 55 55 55 56 56 56 56 56 57 57 57
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks Installation Administrator Tasks Verify supporting software Verify the core platform components support levels. Verify that your PA version supports upgrades to version 4.5. FileNet P8 Platform Documentation URL. IT Administrator Tasks Ensure minimum required disk space and temp space for installation. Back up the PA Engine. Disable scheduled tasks on the PA server. Security Administrator Tasks Verify Oracle listener Gather database information	53 53 55 55 55 55 55 56 56 56 56 56 56 56 57 57 57 57
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks Installation Administrator Tasks Verify supporting software Verify the core platform components support levels. Verify that your PA version supports upgrades to version 4.5. FileNet P8 Platform Documentation URL. IT Administrator Tasks Ensure minimum required disk space and temp space for installation. Back up the PA Engine. Disable scheduled tasks on the PA server. Security Administrator Tasks Verify Oracle listener Gather database information Upgrade SQL Server 2000 to version 2005	53 53 55 55 55 55 55 56 56 56 56 56 57 57 57 57
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks Installation Administrator Tasks Verify supporting software	53 53 55 55 55 55 55 56 56 56 56 56 57 57 57 57 57 57
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks Installation Administrator Tasks Verify supporting software Verify the core platform components support levels. Verify that your PA version supports upgrades to version 4.5. FileNet P8 Platform Documentation URL. IT Administrator Tasks Ensure minimum required disk space and temp space for installation. Back up the PA Engine. Disable scheduled tasks on the PA server. Security Administrator Tasks Verify Oracle listener Gather database information Upgrade SQL Server 2000 to version 2005. Table 4 Upgrade Ageleres Analyzer.	53 53 55 55 55 55 55 56 56 56 56 56 57 57 57 57 57
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs	53 53 55 55 55 55 55 56 56 56 56 56 57 57 57 57 57 57 57 57 57
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs	53 53 55 55 55 55 55 56 56 56 56 56 57 56 57
Supported Upgrade Paths. Configure Process Analyzer to process events from specific isolated regions or event logs Perform Required Preparation Tasks Installation Administrator Tasks Verify supporting software Verify the core platform components support levels. Verify that your PA version supports upgrades to version 4.5. FileNet P8 Platform Documentation URL. IT Administrator Tasks Ensure minimum required disk space and temp space for installation. Back up the PA Engine. Disable scheduled tasks on the PA server. Security Administrator Tasks. Database Administrator Tasks. Verify Oracle listener Gather database information Upgrade SQL Server 2000 to version 2005. Upgrade Process Analyzer documentation Task 1: Upgrade Process Analyzer Client Task 3: Upgrade Process Analyzer Engine Task 3: Upgrade Process Analyzer Client	53 53 55 55 55 55 55 55 56 56 56 56 56 56 57 57 57 57 57 57 57 57 57 57 57 57 57 57

IBM FILENET PROCESS ANALYZER INSTALLATION AND UPGRADE GUIDE

Remove software	5
Appendixes	7
Encrypt Passwords for silent installations and upgrades6	8
Installation and upgrade worksheet6	9
Index	1
Notices	3 75

About this document

This document provides installation and upgrade information about IBM FileNet Process Analyzer.

Topics in this document apply specifically to FileNet Process Analyzer installation tasks. Information about preparing the FileNet P8 Platform environment before you start these installation tasks is in the *Plan and Prepare Your Environment for IBM FileNet P8* document and in this document at "Plan and prepare for installation" on page 18.

To download these documents from the IBM FileNet support Web site, see "Access IBM FileNet documentation, compatibility matrices, and fix packs" on page 16.

Intended audience

This document is intended for software professionals who install IBM FileNet P8 Platform components. IBM recommends that an IBM FileNet Certified Professional (FCP) perform the installation. For more information about the FCP program, contact your IBM service representative.

Typographical conventions

This document uses the following typographical conventions:

Convention	Usage	Example
Bold	Platform-specific headings	Start the application server.
		WebSphere
		Refer to IBM WebSphere documentation for more information.
		WebLogic
		Refer to BEA WebLogic documentation for more information.
Gray bold	Clickable items, such buttons, and tabs.	Click OK.
	Menu paths or breadcrumb trails.	Select Start > Settings > Control Panels > Display > Screen Saver.
Italics	Variables that require user- supplied values	The calculation is: <i>number of object stores</i> * 16 + <i>number of concurrent users</i> .
	Document titles	You are reading the IBM FileNet P8 Platform Installation and Upgrade Guide.
Monospace	Text that has to be typed by the user	Copy the file by entering the following command:
		COPY filename
	Code samples	Find the following text in the web.xml file:
		<context-param><param-name>uploadDir<!--<br-->param-name><param-value>/opt/FileNet/AE/ Upload1</param-value> </param-name></context-param>
	Display text, such as prompts and error messages	Are you sure you want to delete this object? You do not have permission to delete this object.
	Elements such as filenames,	Open the filed file.
	properties, classes and so on, whose meaning might get	Enter a value for the new property.
	confused in regular text.	Select the senior class.

Convention	Usage	Example
"Text with quotation	User-interface fields that do not use initial capitalization	See the "Part number" field for the part number.
referenced within a document	For more information, see "Typographical conventions" on page 10.	
UPPERCASE	Case-sensitive text, where uppercase text is required.	Copy the file by entering the following command:
		COPY filename

Acronyms

This document uses the following IBM FileNet product names and acronyms.

	Acronyms
Application Engine	AE
Content Engine	CE
Content Search Engine	CSE
Enterprise Manager	EM
Global Configuration Data	GCD
Image Services Resource Adapter	ISRA
Process Analyzer	PA
Process Engine	PE
Process Simulator	PS
Rendition Engine	RE

About IBM FileNet documentation

By default, this document is distributed as part of the *IBM FileNet Process Analyzer* help system, but it is also available as a downloadable document from the IBM support Web site. Newer versions of *IBM FileNet P8* documentation are sometimes re-released with other events, such as fix pack releases or documentation refreshes. To ensure that you have the latest revision of a document, compare the document part number of your document to the document part number of the document that is posted on the support Web site:

www.ibm.com/support/docview.wss?rs=3278&uid=swg27010422

For example, the last two digits of "GC31-5585-05" indicate that the specified document has been revised five times after the original publishing, which is designated by 00.

Copy Web documents into the help system and make them searchable

The IBM FileNet P8 help system is designed so that you can download updated copies of this document and copies of other IBM FileNet documents into the *IBM FileNet P8* help system and index them so that they can be retrieved by a search in the help system. However, to search the *IBM FileNet P8* help system, it must be installed as a Web site on a Web server that supports JavaTM applications.

For more information, see the following topics in the *IBM FileNet P8 Platform Installation and Upgrade Guide*:

- "IBM FileNet Web site documents."
- "Install IBM FileNet P8 Platform documentation."
- "Update Documentation Search Index."

Links to additional information

To help you locate additional information about a topic, this document includes links to:

- Other locations in this document
- External Web sites
- Topics in the FileNet P8 help system

Because this document is included in the default FileNet P8 help system, the links to the FileNet P8 help topics work only when you view this document from within the help system. If you view this document from outside of the help system, the links to FileNet P8 help topics do not work.

Gather reference documentation

Following are two tables with information about the IBM FileNet P8 documents that are available as part of the FileNet P8 release. To download these documents from the IBM FileNet support Web site, see "Access IBM FileNet documentation, compatibility matrices, and fix packs" on page 16.

Installation reference documents

Consider having one or more of the following documents (or help topics) nearby for reference purposes during the installation of IBM FileNet Process Analyzer.

Document or help topic name	Refer to this document
IBM FileNet P8 Platform Installation and Upgrade Guide	For information about how to install IBM FileNet P8 Platform in your environment.
Plan and Prepare Your Environment for IBM FileNet P8	To confirm the target environment is ready for a FileNet P8 installation or upgrade.
IBM FileNet Workplace XT Installation and Upgrade Guide	For information about how to install and upgrade Workplace XT in a FileNet P8 environment.
IBM FileNet P8 Hardware and Software Requirements	To confirm that the target environment has at least the minimum supported levels of software from independent software providers.
IBM FileNet P8 Compatibility Matrix	To confirm that the version of FileNet P8 to be installed is compatible with at least the minimum supported levels of other FileNet products that are or will be used with FileNet P8.
IBM FileNet P8 Release Notes	To familiarize yourself with the new features and known issues associated with the FileNet P8 release.
IBM FileNet P8 Non-English Support Guide	For information about how FileNet P8 supports non- English environments.
IBM FileNet P8 High Availability Technical Notice	For information about how to set up FileNet P8 using clusters, farms and other high-availability software and hardware.
IBM FileNet P8 Performance Tuning Guide	For critical tuning information required to make deployments of all sizes and levels of complexity work efficiently before going into production.
	Attention This guide provides many specific recommendations for making performance-related choices that are either difficult or impossible to change once the system goes into production.
IBM FileNet P8 Troubleshooting Guide	For troubleshooting tips associated with a FileNet P8 Installation.

IBM FILENET PROCESS ANALYZER INSTALLATION AND UPGRADE GUIDE

Document or help topic name	Refer to this document
IBM FileNet P8 help topic: Administration > Enterprise-wide Administration > FileNet P8 Security > Users and Groups	For a complete list of the user and group roles, accounts, and responsibilities required to install, configure, and maintain a FileNet P8 system.
IBM FileNet P8 help topic: Administration > Enterprise-wide Administration > Shutdown and Startup	For information about how to shut down and start up FileNet P8 and any expansion products.

Other available documentation

Review the list of remaining FileNet P8 documents that you can download from the FileNet support Web site.

Document name	Refer to this document
IBM FileNet P8 System Overview	For a technical summary of the FileNet P8 architecture, including a overview of features and capabilities.
IBM FileNet P8 Disaster Recovery Technical Notice	For information about potential options and solutions involved in a FileNet P8 disaster recovery plan.
IBM FileNet P8 Process Task Manager Advanced Usage Technical Notice	For information about properties found under the Advanced tab in Process Task Manager.
IBM FileNet P8 Version Tools Technical Notice	For information about the set of versions tools that are installed with FileNet P8 Platform and that identify the levels of Application Engine, Content Engine, and Process Engine in a FileNet P8 environment.
IBM FileNet P8 Security Help Extract	For security-related information from the FileNet P8 help system in PDF format.
IBM FileNet Rendition Engine Installation and Upgrade Guide	For information about how to install and upgrade Rendition Engine in a FileNet P8 environment.
IBM FileNet P8 eForms Installation and Upgrade Guide	For information about how to install and upgrade eForms in a FileNet P8 environment.
IBM FileNet Connector for SharePoint Web Parts Installation and Upgrade Guide	For information about how to install and upgrade IBM FileNet Connectors for SharePoint Web Parts in a FileNet P8 environment.
IBM FileNet Connector for SharePoint Document Libraries Installation and Upgrade Guide	For information about how to install and upgrade IBM FileNet Connectors for SharePoint Document Libraries in a FileNet P8 environment.

Document name	Refer to this document
IBM FileNet P8 Portlets for	For information about how to install and upgrade
WebSphere Installation and Upgrade	FileNet P8 Portlets for WebSphere in a FileNet P8
Guide	environment.
IBM FileNet Process Analyzer	For information about how to install and upgrade
Installation and Upgrade Guide	Process Analyzer in a FileNet P8 environment.
IBM FileNet Process Simulator	For information about how to install and upgrade
Installation and Upgrade Guide	Process Simulator in a FileNet P8 environment.
IBM FileNet Records Manager	For information about how to install and upgrade
Installation and Upgrade Guide	Records Manager in a FileNet P8 environment.
IBM FileNet Business Activity Monitor	For information about how to install and configure
Installation and Configuration Guide	Business Activity Monitor in a FileNet P8 environment.
IBM FileNet Content Federation	For information about how to install and upgrade
Services Installation and Upgrade	Content Federation Services in a FileNet P8
Guide	environment.
IBM FileNet Content Federation Services for Image Services Planning and Configuration Guide	For information about how to configure Image Services for document federation.
IBM FileNet Content Federation Services for Content Manager OnDemand Planning and Configuration Guide	For information about how to configure Content Manager for OnDemand for document federation.
IBM FileNet Content Management	For information about how to install Content
Widgets Installation Guide	Management Widgets in a FileNet P8 environment.

Autonomy K2 software documentation for configuring the FileNet P8 Content Search Engine

Autonomy (formerly Verity) K2 software, which underlies the optional CSE component, installs with a large body of documentation that is not included in the general FileNet P8 documentation. For details on how to access this documentation, see the "Configure Content Engine for Content-Based Retrieval" topic in the *IBM FileNet P8 Platform Installation and Upgrade Guide*.

Access IBM FileNet documentation, compatibility matrices, and fix packs

To access documentation, compatibility matrices, and fix packs for IBM FileNet products:

- Navigate to the Product Documentation for FileNet P8 Platform support page. (www.ibm.com/support/docview.wss?rs=3247&uid=swg27010422).
- 2. Select a PDF file or click a Document Link icon, whichever is appropriate.

Customer support

For information about contacting customer support:

1. Navigate to the FileNet Product Family support page:

(www.ibm.com/software/data/content-management/filenet-product-family/support.html).

2. Click **IBM FileNet Support Communications**, or search for a particular support topic under "Enter search terms".

Feedback

Your feedback helps us to provide quality information. Send your comments about this publication or any other IBM FileNet documentation by e-mail to comments@us.ibm.com. Be sure to include the name of the product, the version number of the product, and the name and part number of the book (if applicable). If you are commenting on specific text, include the location of the text (for example, a chapter and section title, a table number, a page number, or a help topic title).

Plan and prepare for installation

The topics in this section explain the process for planning for and performing the required prerequisite tasks for a FileNet Process Analyzer (PA) installation. Review all of the topics in the following sections carefully before you begin.

Plan the installation

This section lists details that will help you prepare your environment for the installation of PA on an IBM FileNet P8 system. In many cases, the items are links to more detailed information which will help you plan a system rollout of this expansion product. Review this section thoroughly before you start to set up associated IBM FileNet P8 components or required third-party software.

Before you begin to install PA, perform the following planning activities:

- Gather auxiliary documentation. Browse their contents and study those parts that seem most relevant to your installation and application plans.
- See "Use the installation worksheet" on page 20 for more information on an available Worksheet to record information that will be needed during installation.

Definition of roles

The tasks in this guide as well as the rows in the "Installation and upgrade worksheet" referenced in "Use the installation worksheet" on page 20 are organized by administrative roles, listed below.

Your organization may have different roles, and some of the responsibilities of listed roles will vary from those assigned by default in this documentation.

Installation administrator (IA)

- Responsible for coordinating the information described in this worksheet. The information itself will require the input from the other roles. See "Use the installation worksheet" on page 20.
- Runs IBM FileNet installation programs during initial installation.
- Runs the Configuration Manager tool during initial installation.
- Launches Enterprise Manager during initial installation.
- Runs IBM FileNet Upgrade programs during upgrades.

The role of IA is usually filled by an IBM FileNet Certified Professional (FCP).

IT administrator (ITA)

- Responsible for the networking and operating systems issues required by IBM FileNet P8.
- Responsible for those security configurations not assigned to the SA.
- Responsible for providing the information in the rows in the Installation and Upgrade Worksheet with a value of ITA in the Role column.

For tasks assigned to the ITA, see "IT administrator tasks" on page 24.

Security administrator (SA)

- Responsible for configuring the directory servers required by IBM FileNet P8, including Content Engine, Application Engine, CFS Federation Administration application.
- · Creates and maintains directory server user and group accounts
- Decides on configuration parameters required to connect
- Responsible for providing the information in the rows in the Installation and Upgrade Worksheet with a value of SA in the Role column.

For tasks assigned to the Security Administrator, see "Security administrator tasks" on page 25.

Database administrator (DBA)

- Creates, configures, maintains database installations and database/tablespaces.
- Responsible for creating database accounts needed by FileNet P8.

IBM FILENET PROCESS ANALYZER INSTALLATION AND UPGRADE GUIDE

- Might have responsibilities regarding the JDBC datasources
- Responsible for providing the information in the rows in the Installation and Upgrade Worksheet with a value of DBA in the Role column.

For tasks assigned to the Database Administrator, see "Database administrator tasks" on page 28.

Use the installation worksheet

This planning and preparation guide includes a link to an associated Installation and Upgrade Worksheet, which is a spreadsheet file. You can enter information into the worksheet while you perform the preparation tasks for your FileNet P8 Platform environment. Information you collect in the worksheet will be used to complete various FileNet P8 installation, upgrade, and configuration tasks.

For more information, see "Installation and upgrade worksheet" on page 69.

Here are some things to know about the worksheet:

- The rows in the worksheet correspond to field names, properties, and parameters that must be entered in the course of installing or upgrading FileNet P8 Platform components.
- Each row of the worksheet is designated for a particular administrator role. Review the rows in the worksheet before you begin your preparation tasks.
- The Installation and Upgrade Worksheet is designed to be customized. You can sort the worksheet by different columns to get a specific view of the information that each administrator is expected to provide. Note that only some of the rows assigned to each administrator will apply for a particular installation. For example, some rows are specific to platform type, application server vendor type, database type, and so forth. Each row is also specific to a FileNet P8 component or add-on product. Work with your installation administrator or IBM services representative to determine the rows that are relevant for your installation. If these individuals provide you with variations of this table, use such variations instead to collect your data

Perform Required Preparation Tasks

ATTENTION In addition to the preparation tasks listed below, follow the plan and prepare instructions in the *Plan and Prepare Your Environment for IBM FileNet P8* document for the components you are installing.

To prepare your environment for a Process Analyzer installation

Perform the required preparation tasks for the components you plan to install:

- "Installation administrator tasks" on page 22
- "IT administrator tasks" on page 24
- "Security administrator tasks" on page 25
- "Database administrator tasks" on page 28

In addition, if you are using the Installation and Upgrade Worksheet for your environment, all administrators should fill out the worksheet with the relevant information as described in."Installation and upgrade worksheet" on page 69.

Installation administrator tasks

The items below are the required tasks for the Application Installer Administrator.

Choose Installation Mode

PA Engine software can be installed interactively or silently. To install silently, a response file containing configuration information is needed by the installer.

A sample response file is supplied with the PA installer. See "To install Process Analyzer Engine software silently" on page 39.

Plan your installation

You can install Process Analyzer to connect to one Process Engine region only. To cover multiple Process Engines or multiple regions on a single Process Engine you must install multiple Process Analyzers, each connecting to one Process Engine or region.

Cluster installation

Cluster deployments can be used to provide high availability. Refer to the *IBM FileNet P8 Platform High Availability Technical Notice* for details on how to set up your IBM FileNet PA system using clusters and other high availability software and hardware.

Process Analyzer installation use cases

There are two typical use cases for PA:

- Production PA is for analyzing data from a production system. In addition, production PA can provide production input data to Process Simulator (PS).
- Simulation PA is for analyzing simulation data, and it is populated with output from Process Simulator.

Process Analyzer limitations

Before you install PA, be aware that IBM FileNet does not support:

- Using a single PA for both production and simulation activity, or storing both production data and simulation data in the same database.
- Collocating PS and PA where PA is used in a production context. Collocation of PS and PA is supported where PA is used in a simulation context.

Plan for Non-English Environment Installation

NOTE For details on the supported levels of third-party software components and version requirements for non-English installations, refer to the *IBM FileNet P8 Hardware and Software Requirements Guide*, and the topic "Non-english environment considerations" in the *Plan and Prepare Your Environment for IBM FileNet P8* guide.

To download this document from the IBM support page, see "Access IBM FileNet documentation, compatibility matrices, and fix packs" on page 10.

Language support for process analysis

Process Analyzer is not Unicode enabled to support multiple languages; the software only supports the languages supported by the codepage set for the PA Engine server Windows® operating system.

To set up Process Analyzer in a multi-lingual Process Engine environment (UNIX® running Oracle or DB2, using UTF-8 locale with UTF-8 database character sets only) you must install and configure separate PA Engines for each language specific isolated region or event log.

PA installation with multi-lingual Process Engine

Multi-lingual Process Engine can support all languages, however, Process Analyzer can only support the languages supported by the Windows codepage. It is critical to make sure that the Process Engine region only uses the characters supported by the PA connected to the region. Characters not supported by the Process Analyzer can be corrupted in the database.

Available languages

The Process Analyzer 4.5 user interface is translated. Process Analyzer 4.5 Client is translated.

For more information about available languages, translated user interface, display settings, and functionality related to localized components, see the *IBM FileNet P8 Non-English Support Guide*.

NOTE If you are installing or upgrading a localized client, you must use the language specific client installer located in the /PA Client/ folder. For information, see "Install Process Analyzer Client" on page 47.

Plan for additional software requirements

Follow the installation or upgrade tasks provided in this manual to install a new 4.5 PA or upgrade an existing 3.5 or 4.0 PA to version 4.5. After your system is successfully running 4.5, follow the procedures in "Install Process Analyzer software updates" on page 52 to apply any required fix packs.

IT administrator tasks

The items below are the required tasks for the Information Technology (IT) administrator.

Ensure minimum required disk space and temp space for installation

See the IBM FileNet P8 4.5 Hardware and Software Requirements.

Create a shared Temp directory

(If the database is remote) On the PA Engine server, create a shared Temp directory and grant full access rights on the folder to the *pa_administrator*. Full access rights should be set on the Security and Sharing tabs. This directory will be used when configuring PA, in "In Process Task Manager, specify the path for the shared Temp directory in UNC format." on page 43.

Configure Microsoft Windows

To configure ports

- See the *IBM FileNet P8 Platform Installation and Upgrade Guide* for information on required ports for PA and other FileNet P8 system components.
- PA requires a static TCP/IP port number for the PA database instance.

The port number is required during PA installation.

Configure Network

The requirements in this Task apply to the network on which FileNet P8 servers are running.

To configure Active Directory

(If you are using Active Directory) The Microsoft® SQL Server[™] must be in the same Active Directory forest as the PA server.

To configure time and date

Ensure that the following components are in the same time zone and synchronized to the same time:

- Process Analyzer server (PA Engine)
- Process Analyzer Database server (PA database)
- Process Analyzer Analysis Server (OLAP Database) (if separate from the PA Engine and PA database).
- Process Engine (PE)

Security administrator tasks

The items below are the required tasks for the Security Administrator.

Create Required Users

To create users required for MS SQL installation

To install SQL Server, you need a local user with administrator privileges on the computer where the database will be installed.

To create users required for Process Analyzer installation

Create or identify the following user:

pa_install_user

This user must:

- be a local or domain Windows user belonging to the local Administrators group on the computer where PA Engine will be installed.
 - **NOTE** If the database is remote from the PA server, you must use a domain user.
- be added as a SQL Server Login user for the PA database, with the following SQL Server roles:
 - Database Creators
 - Bulk Insert Administrators
 - System Administrators
- have administrative privileges on the Online Transaction Analysis Processing (OLAP) database.

For instructions, see "Configure Windows users with administrative privileges on the Online Transaction Analysis Processing (OLAP) database." on page 27.

To create users required at runtime

Create or identify the following users:

• pa_administrator

This user must:

 be a local or domain Windows user who has write access on the local computer (where the PA Engine will be installed).

NOTE If the database is remote from the PA server, you must use a domain user.

 be added as a SQL Server Login user for the PA database, with the System Administrators SQL Server role.

NOTE Ensure that you configure the SQL Server Analysis Services service to log in as the *pa_administrator* user. For information, see "Configure the following service to log on as the pa_administrator." on page 43.

 have administrative privileges on the Online Transaction Analysis Processing (OLAP) database.

For instructions, see "Configure Windows users with administrative privileges on the Online Transaction Analysis Processing (OLAP) database." on page 27.

• pa_db_administrator

NOTE Use *pa_db_administrator* as the *TextForDBUser* user when configuring the response file for silent installations. For information, see "To install Process Analyzer Engine software silently" on page 39 and "Encrypt Passwords for silent installations and upgrades" on page 68.

This user must be a MS SQL database user with:

- the following MS SQL database privileges on the SQL Server PA database:
 - db_owner
 - ddl_admin
- the following MS SQL database role on the SQL Server PA database:
 - Bulk Insert Administrators
- PEDatabaseUserNameForPA

This user is required to configure the PE database connection. See "Configure Connection to Process Engine." on page 44.

This user must be created as:

SQL Server

a user with read and write privileges on the PE database tables.

Oracle

a user with the following privileges on the PE database:

- SELECT privilege on all PE database tables and views
- SELECT, INSERT, and UPDATE privileges on the vwpaeventstate database table
- SELECT ANY DICTIONARY privilege
- DB2®

Use the Process Engine runtime user (f_sw or its alias) or a database administrator account.

NOTE Be sure to change the default "Database User Name" for PA database access. For information, see "Configure Connection to Process Engine." on page 44.

For information about the required permissions and how to create this database user, see the *FileNet P8 Help* topic FileNet P8 Administration > Enterprise-wide Administration > Process Task Manager > Process Analyzer > Configure Process Analyzer > Database Properties, and look for the table entry Database User Name.

• pa_client_database_user

The Windows (local or domain) user you use to log on to the PA Client server must have permission to access the OLAP cubes on the Process Analyzer analysis server for the client to be able to connect to the PA OLAP database.

For more information on how to configure the *pa_client_database_user* see "To grant access rights to the Process Analyzer OLAP database" on page 47 and "Configure the PA Client." on page 49.

Depending on how your environment is set up, either of the following scenarios could apply:

- (If the analysis server and PA Client server belong to the same LDAP domain) Give the domain user or group access to the OLAP cubes on the analysis server
- (If the analysis server and PA Client server do not belong to the same domain) Create a duplicate of the client user on the analysis server, and give the user access to the OLAP cubes.

NOTE When you create the duplicate user, you must create a user with the same user name and password as is used for the Windows logon to the PA Client server.

Configure Windows users with administrative privileges on the Online Transaction Analysis Processing (OLAP) database.

This procedure is referenced from "To create users required for Process Analyzer installation" on page 25 and "To create users required at runtime" on page 25.

To add the user to the server role within SQL Server 2005 Analysis Services (SSAS)

- 1. Open SQL Server Management Studio.
- 2. In the Connect to Server window, connect to the instance of SQL Server 2005 Analysis Services that you are using.
- 3. In Object Explorer, right-click your SQL Server 2005 Analysis Services instance name, and select **Properties**.
- 4. On the Analysis Services Properties page, in the Select a page pane, click Security.

NOTE Users and Groups that are members of the server role will appear in a list.

- 5. Click Add.
- 6. In the Select Users or Groups page, go to the "Enter the object names to select" field and enter the name of the Shared Services Provider (SSP) account that you are adding to the server role.

NOTE Click Check Name to verify that the account exists.

7. Click OK.

IBM FILENET PROCESS ANALYZER INSTALLATION AND UPGRADE GUIDE

Database administrator tasks

The items below are the required tasks for the database administrator.

Prepare for database installation

• The PA installation program automatically creates the following two databases.

Table 1: Databases created by the PA installation program.

Database	Database name
PA database	User defined (E.g. VMAEDM)
OLAP database	User defined (E.g. VMAE)

NOTE (Upgrades) For SQL Server 2000, if PA is configured with a named database instance, the name of the OLAP database is VMAE_*database_instance_name*. For example, if the database instance name is "inst1," the OLAP database name is VMAE_inst1. For more information, see "Instance name." on page 29.

• Ensure that PA database files are on an NTFS-formatted drive.

The PA database files can grow large over time. To allow the file sizes to grow beyond 4GB, the database file must be located on a drive that is formatted as NTFS.

• You can use a local or remote PA database and OLAP database.

The database engine is *local* if it is installed on the same server that you install the PA Engine software. The database is *remote* if it is on a separate server from PA using that database.

NOTE If the database is remote you must create a shared Temp directory on the PA Engine server and grant full access rights on the folder to the *pa_administrator*. For information see, "Create a shared Temp directory" on page 24 and "In Process Task Manager, specify the path for the shared Temp directory in UNC format." on page 43.

• For performance reasons FileNet does not recommend collocating the PE and PA databases.

Prepare Microsoft SQL Server

NOTES

- With Microsoft SQL Server 2005 you can install the Process Analyzer database and the Analysis database (OLAP) collocated or on separate servers.
- Configure the SQL Server database for Mixed Mode authentication.
- The PA installation program automatically creates the Process Analyzer and Analysis databases. No manual steps are required.
- During the SQL Server installation, record the values for the following settings. You will use this information during PA Engine installation in "(Remote Database) Specify the Database Configuration Parameters" on page 37 or "(Local Database) Specify the Database Configuration Parameters" on page 37.
 - Process Analyzer database
 - Server name.
 - Instance name.
 - TCP/IP port assigned to the database instances. See "To configure ports" on page 24.
 - Name and password of the *pa_db_administrator* user that PA will use to access the database. See "To create users required at runtime" on page 25.
 - (MS SQL 2005) Analysis database
 - Analysis Services server name (if separate from PA database Server).
 - OLAP instance name.
 - Static TCP/IP port assigned to the analysis server instance. See "To configure ports" on page 24.

To install and configure Microsoft SQL Server 2005

In addition to the following instructions, refer to Microsoft's SQL Server 2005 installation instructions.

NOTE With Microsoft SQL Server 2005 you can install the Process Analyzer database and the Analysis database (OLAP) collocated or on separate servers.

- 1. Log on as a local user with administrator privileges on the computer where the database will be installed.
- 2. In the Components to Install screen, at a minimum, select the following components:
 - Process Analyzer database and Analysis database collocated:
 - SQL Server Database Services
 - Analysis Services
 - Workstation Components, Books Online and development tools

IBM FILENET PROCESS ANALYZER INSTALLATION AND UPGRADE GUIDE

- Process Analyzer database only:
 - SQL Server Database Services
 - Workstation Components, Books Online and development tools
- Analysis database only:
 - Analysis Services
 - Workstation Components, Books Online and development tools
- 3. Create a database instance for use by PA software, or verify that such an instance already exists.
- 4. In the Service Account screen, choose Use the built-in System account, and select Local System from the drop-down menu.
- 5. Verify that authentication mode is set to Mixed Mode.
- 6. Provide an sa password for your site.
- 7. Select the database collation settings. Specify one of the following:
 - Dictionary order, case-insensitive, for use with 1252 Character Set (or any case-insensitive SQL Server collation). Case-insensitive collation is the Microsoft default and the setting most used in FileNet P8 environments (because it offers search results without regard to character case).
 - Dictionary order, case-sensitive, for use with 1252 Character Set (or any case-sensitive SQL Server collation). Select case-sensitive SQL Server collation only if you are sure your site requires (and will continue to require) searches that must differentiate upper-case from lower-case characters (in property choice lists, folder names, and so on.).

CAUTION Select your SQL Server collation setting carefully. Switching collation settings after installation can be difficult and time-consuming, especially if you want to switch from case-sensitive to case-insensitive collation after significant user activity. Also, be aware that if you have a case-sensitive database and you want to perform a case-insensitive search programmatically or otherwise, you will likely encounter serious performance degradation on SQL Server because the database cannot use column indexes in these cases.

8. Define a static port number.

If the PA database instance is not the only instance on the server, you must assign a nonconflicting static port number for the PA database instance using SQL Server Configuration Manager. For information, see your SQL Server Documentation.

- 9. Download and install the required Microsoft SQL Server 2005 Service Packs, as indicated in IBM FileNet P8 Platform Hardware and Software Requirements.
- 10. Restart the server.
- 11. Verify that the *pa_install_user* user has been given administrative privileges on the Online Transaction Analysis Processing (OLAP) analysis server.

See the subtopic "To add the user to the server role within SQL Server 2005 Analysis Services (SSAS)" of "Configure Windows users with administrative privileges on the Online Transaction Analysis Processing (OLAP) database." on page 27.

Install database drivers on the Process Analyzer Engine server

To install the Microsoft SQL Server JDBC 2005 1.2 driver

If the Microsoft SQL Server JDBC 2005 1.2 driver is not already installed on your system, download and install it from http://www.microsoft.com.

NOTE To complete the PA installation, enter the path to the Microsoft SQL Server JDBC 2005 1.2 driver install location, see "Configure JDBC Driver" on page 37.

Collect the required database information

- 1. Before you install and configure the PA Engine, collect the information you will need during installation and configuration:
 - The path to the Microsoft SQL Server JDBC driver install location. See "To install the Microsoft SQL Server JDBC 2005 1.2 driver" on page 31.
 - The dedicated TCP/IP port number of the SQL Server database instance used by the PA Engine.
 - If you are installing SQL Server specifically for PA, you assigned the port number in "Define a static port number." on page 30.
 - If you are using a shared database instance, use the following procedure to determine the TCP/IP port number.
 - i.Open the Microsoft SQL Server 2005 program group and open "Configuration Tools".
 - ii.Select "SQL Server Configuration Manager".
 - iii.Expand the "SQL Server 2005 Network Configuration" leaf.
 - iv.Select "Protocols for MSSQLSERVER" or your Named Instance and double click "TCP/IP" and select the "IP Address" tab.
 - v.In the TCP/IP Properties dialog box locate the "TCP Port" to identify the TCP/IP port.
 - The name of the database server, if PA is configured with a remote database.
 - The name of the database instance, if PA is configured with a non-default database instance.
 - (MS SQL 2005) The name of the Analysis Services server, if separate from the database server.
 - (MS SQL 2005) The name of the Analysis Services instance, if Analysis Services is configured as a named instance.
 - The *pa_db_administrator* user ID and password for the PA database instance. This is the user created in "To create users required at runtime" on page 25.
- 2. (If the PA database will be remote from the PA Engine) Continue with "To install SQL Server Client 2005" on page 33.
- 3. (If the PA database will be local to the PA Engine) Continue with Task 2 "Install Process Analyzer Engine" on page 36.

Prepare Microsoft SQL Server client

If the PA database is remote from the PA server you must install the Microsoft SQL Server Client software on the PA Engine server.

To install SQL Server Client 2005

- 1. Install the SQL Server Client software.
 - a. Log on to the PA server with an account that has local administrator privileges.
 - b. Install the SQL Server Client software using the following options:
 - In the Components to Install screen, select Workstation Components, Books Online and development tools.
 - In the Feature Selection dialog, select the following Client Components:
 - Connectivity Components
 - Management Tools
 - Accept the defaults for the rest of the installation.
- 2. Download and install the required Microsoft SQL Server 2005 Service Pack, as indicated in the IBM FileNet P8 Platform Hardware and Software Requirements.
- 3. Verify the connection between the SQL Server Client installation and the database machine using either of the following methods:
 - At a command prompt type:

```
sqlcmd -E -S servername[\instance_name]
```

• Use SQL Server Management Tools to test the connection to the Analysis Server.

If the connection fails, be sure to resolve the problem before you proceed.

Install and configure Process Analyzer

This installation section contains the following major topics:

- Task 1 "Install Process Analyzer documentation" on page 35
- Task 2 "Install Process Analyzer Engine" on page 36
- Task 3 "Install the latest Content Engine Client files on Process Analyzer server" on page 40
- Task 4 "Install the latest Process Engine Client files on Process Analyzer server" on page 42
- Task 5 "Configure Process Analyzer Engine" on page 43
- Task 6 "Install Process Analyzer Client" on page 47
- Task 7 "Install Process Analyzer software updates" on page 52

Task 1: Install Process Analyzer documentation

Process Analyzer (PA) is an expansion product on IBM FileNet P8 Platform; therefore you must add the associated PA documentation to an existing installation of the IBM FileNet P8 Platform Help. This action makes PA help available to your users and enables context-sensitive help from the product user interface.

For details and instructions on installing expansion product documentation, see the latest version of the *IBM FileNet P8 Platform Installation and Upgrade Guide*. Pay special attention to the "Install expansion product documentation" subtopic in the "Install IBM FileNet P8 documentation (*your application server*)" task.

NOTE You can install only the 4.5 version of PA documentation on an existing IBM FileNet P8 Platform 4.5 documentation server.

Task 2: Install Process Analyzer Engine

Installing the Process Analyzer (PA) PA Engine component requires changes to the configuration of Process Engine (PE), Application Engine (AE), and the database server, as well as on the machine where PA Engine is installed. The required configuration changes are presented below. Perform the tasks in the order they are presented.

To install Process Analyzer Engine Software interactively

- 1. Ensure that the database instance and analysis services that the PA Engine will use are running.
- 2. Log on as the *pa_install_user* user, as defined in "Plan for additional software requirements" on page 23.
- 3. Access the IBM FileNet Process Analyzer 4.5 software package.
- 4. Launch the installation program (P8PA-4.5-Engine.exe, located in the PAEngine directory) to start the installation process.

For information on parameter values, see "Installation and upgrade worksheet" on page 69.

HINT With the **Data > Filter > AutoFilter** command enabled, as it is by default in the shipping worksheet file (p8_worksheet.xls), perform the following steps to quickly see only the installation properties you must specify for the Process Analyzer installation program:

- Click the AutoFilter drop-down arrow in the "Installation or Configuration Program" column header and select PA installer.
- Click the AutoFilter drop-down arrow in the "Setup Type" column header, select Custom, and specify: Setup Type contains "Installation."

In this screen	Perform this action
License Agreement	Review and accept the license agreement.
Specify Installation Location	Choose the destination drive and directory for Process Analyzer Engine software.
Specify the Documentation URL	Enter the Documentation URL, which is where the FileNet P8 Platform Documentation is installed. Your entry must be in the following format:
	http://docserver:port#/ecm_help
	where:
	• <i>docserver</i> is the name of the Java web server.
	• <i>port#</i> is the port number.
	 <i>ecm_help</i> is the root folder of the documentation website. You can use multi-part root folders (for example,/docs/ ecm_help) if your application server supports them.
In this screen	Perform this action
---	--
Specify Installation Location for Common Files	Choose the destination directory for configuration files that will be shared with other FileNet P8 components.
	Accept the default location or click Browse to change the location.
Specify the Database Location	Indicate whether the database will be local or remote.
(Remote Database)	Enter the name of the remote database server.
Specify the Database Configuration Parameters	Enter the name of the instance to be used by PA. Leave the field blank if the default instance is to be used; otherwise enter the name of the instance that was created in "Prepare Microsoft SQL Server" on page 29.
	Enter the static TCP/IP database port number that was assigned in "Prepare Microsoft SQL Server" on page 29.
	Enter the database user name and password. This is the name of the <i>pa_db_administrator</i> created in "To create users required at runtime" on page 25.
(Local Database) Specify the Database Configuration Parameters	Enter the name of the instance to be used by PA. Leave the field blank if the default instance is to be used; otherwise enter the name of the instance that was created in "Prepare Microsoft SQL Server" on page 29.
	Enter the static TCP/IP database port number that was assigned in "Prepare Microsoft SQL Server" on page 29.
	Enter the database user name and password. This is the name of the <i>pa_db_administrator</i> created in "To create users required at runtime" on page 25.
Specify the Database Name	Enter the name of the database you want to create.
Specify the Analysis	Enter the following information:
Services Configuration Parameters	Analysis Services Server name.
	Analysis Services Instance Name.
	NOTE Leave blank if you are using the default instance.
	Analysis Services Database Name.
Configure JDBC Driver	Enter the Microsoft SQL Server JDBC 2005 1.2 driver classname and classpath.
Specify Process Analyzer Usage	Indicate whether PA will be used to analyze production or simulation data, or both.

In this screen	Perform this action
Choose an Application Server	Select the application server and version used by Content Engine.
Content Engine API Configuration	Configure the Content Engine API as follows:
	a. Transport Method
	Select WSI from the drop-down list.
	b. Content Engine Client Software URI
	Replace the sample server name and http port number (<i>CEserver.example.com:7001</i>) with the Content Engine server name and HTTP port number that Process Analyzer will connect to.
	The port number depends on which application server CE is installed on.
	For example:
	WebSphere®
	http://hqcemp2:9080/wsi/FNCEWS40DIME
	WebLogic
	http://hqcemp1:7001/wsi/FNCEWS40DIME
	JBoss
	http://hqcemp3:8080/wsi/FNCEWS40DIME
	CAUTION Do not change any other default values in the the remainder of the string.
Install JVM	If prompted, click Yes to install a JVM in the installation directory.
Installation Summary	Read and verify the installation summary information.
	Click Install if the information is correct, or click Back to make changes.
Select Software Components to Start	Select the software components that should be started when the Process Analyzer installation is complete.

In this screen	Perform this action
Complete the Installation	When the installation is complete and the selected software has been started, click Finish to exit the installation program.
	NOTES
	• If the installer detects that a reboot is required, click Next to continue the installer wizard.
	• In addition to installing PA Engine, the installation program creates the PA and OLAP databases, see "Prepare for database installation" on page 28. This process could take several minutes to complete.
System reboot prompt	If the installer prompts you for a system reboot, select Yes, restart my computer to reboot automatically after the installer completes. Select No, I will restart my computer at a later time if you plan to reboot your system manually.

5. Check for errors in the Process Analyzer error log files at:

C:\Program Files\FileNet\PAInstalllog.txt

C:\Program Files\FileNet\PAServiceInstalllog.txt

6. Continue with "Install the latest Content Engine Client files on Process Analyzer server" on page 40.

To install Process Analyzer Engine software silently

A sample response file for the PA Engine installation is located on the installation media in the PA Engine directory. The filename is InstResponse.txt.

To install silently, change directories to the temporary location for the contents of the PA Engine directory. Verify that the response file is in that directory. Execute the following command at a command prompt:

P8PA-4.5.0-engine.exe -silent -options InstResponse.txt -G overwriteJVM="yes"

NOTE The *TextForDBPassword* connected with the *TextForDBUser* is required to silently install FileNet P8 Process Analyzer Engine. Use the *pa_db_administrator* user when configuring this user and password. This password must be encrypted before you enter it in the silent installation resource files. For instructions, see "Encrypt Passwords for silent installations and upgrades" on page 68.

When the installation is complete, check the following log files to verify that the installation was successful, and then continue with "Install the latest Content Engine Client files on Process Analyzer server" on page 40.

- PAInstalllog.txt
- PAServiceInstalllog.txt

Task 3: Install the latest Content Engine Client files on Process Analyzer server

To install the 4.0.x or 4.5 release or fix pack version Content Engine Client files, perform the following procedures on the Process Analyzer server.

(Upgrades) To uninstall CE Client 4.0.x instances

Perform the following procedure to identify and uninstall all Content Engine Client version 4.0.x files on your Process Analyzer machine.

Depending on the CE Client fixpack versions that you have installed, you may have more than one instance of the CE Client 4.0.x installed. Additionally, the version 4.0.x CE Client installer supported installing multiple instance of the CE Client on the same server. You need to uninstall all instances before upgrading to the 4.5 version of CE Client.

- 1. Select Start > Settings > Control Panel > Add/Remove Programs.
- 2. Select Content Engine Client Updater or IBM FileNet Content Engine Client Installer, depending on the fixpack version of Content Engine Client that is installed.

Prior to Fix Pack 6: The Content Engine Client is named Content Engine Client Updater.

As of Fix Pack 6: The Content Engine Client is named IBM FileNet Content Engine Client Installer.

- 3. Click Change/Remove to start the uninstaller.
- 4. In the Uninstall IBM FileNet Client Installer screen, click Next.
- 5. In the Select Components screen, select Complete Uninstall. Click Next.
- 6. In the Uninstall Complete screen, click Done.
- 7. Repeat Step 2 through Step 6 for each additional instance of Content Engine Client Updater or IBM FileNet Content Engine Client Installer listed in Add/Remove Programs.

To install the Content Engine Client files

Refer to the appropriate information from your installation worksheet while performing the following steps.

- 1. To download the latest software updates, and to determine which of these updates may be required for use with other components and expansion products, contact your service representative.
- 2. On the machine where Process Analyzer is installed, log on as any user who has the following permissions:
 - Read and write permission to a temporary directory, such as temp, on the machine where Process Analyzer is installed
 - Execute permission on the Content Engine Client install software

- 3. Copy the Content Engine Client install software from the Content Engine installation software to the temporary directory. The version of the install software must match the version of Content Engine.
- 4. Expand the Content Engine Client install software within the temporary directory.
- 5. From the Windows Services console, stop the Process Analyzer Services Manager service.
- 6. Start the Content Engine client install process.
 - To install the Content Engine client interactively:
 - i. Access the IBM FileNet Content Engine client update software.
 - ii. Run the following commands, where *CE_version* is the version of Content Engine you intend to run, for example, 4.5.0:

P8CE-CLIENT-CE_version-WIN.EXE

iii. Complete the installation program wizard.

NOTE When prompted, select to run the client installer for your PA installation.

- To install the Content Engine client files silently:
 - i. Make a back up copy of the input file:

CEClient_silent_install_win.txt

ii. Open the silent input file in a text editor. Follow the instructions in the silent input file to edit the file to reflect the appropriate responses for your update.

NOTE Configure the client installer to update your PA installation.

iii. Navigate to the path containing the Content Engine Client installation program, and run the command listed below to perform the silent install, where:

CE_version is the version of Content Engine you intend to run, for example, 4.5.0.

path is the path that contains the installation program

P8CE-CLIENT-CE_version-WIN.EXE -f path\CEClient.Windows\ CEClient_silent_install_win.txt -i silent

7. From the Windows Services console, restart the Process Analyzer Services Manager service.

NOTE If you plan to install the Process Engine client files, you can restart the service after running that installer.

Task 4: Install the latest Process Engine Client files on Process Analyzer server

To install the Process Engine Client files, perform the following steps on your Process Analyzer server.

To install the Process Engine client files

- 1. On the machine where process Analyzer is installed, log on as any user who has the following permissions:
 - Read and write permission to a temporary directory, such as temp, on the machine where Process Analyzer is installed
 - Execute permission on the Process Engine Client install software
- 2. Copy the Process Engine Client install software from the Process Engine installation software to the temporary directory. The version of the install software must match the version of Process Engine.
- 3. Expand the Process Engine Client install software within the temporary directory.
- 4. From the Windows Services console, stop the Process Analyzer Services Manager service if running.
- 5. The expanded install software contains the Process Engine Client install program specific to the operating system on the machine where Process Analyzer is installed. Run the program either interactively (using the install wizard) or silently.

To run the program interactively, execute the client installer, and follow the wizard instructions.

P8PE-CLIENT-4.5.0-WIN.EXE

To run the program silently, perform the following:

In the expanded install software, open the file PEClient_silent_install.txt and edit it as follows:

- a. Change the Variable_CheckboxPA line to the following:
 - -V Variable_CheckboxPA="true"
- b. Run the following command to perform the silent install:

P8PE-CLIENT-4.5.0-WIN.EXE -silent -options "PEClient_silent_install.txt"

- 6. From the Windows Services console, restart the Process Analyzer Services Manager service.
- 7. Continue with "To configure Process Analyzer" on page 43, or, if you are performing an upgrade, with "Upgrade the PA database." on page 62.

Task 5: Configure Process Analyzer Engine

After installing the Content Engine and Process Engine client file, you must now configure Process Analyzer.

To configure Process Analyzer

- 1. Configure PA Engine.
 - a. From the Windows Start menu, navigate to Programs > FileNet P8 Platform > Process Analyzer > Process Task Manager.
 - b. (Windows 2008) Click Run As Administrator.
 - c. Schedule data warehouse pruning and cube processing.
 - i. Select the Process Analyzer node and click the Scheduler tab.
 - ii. Choose the desired scheduling options for the cube processing and pruning events.

Configure any additional PA options on the remaining tabs as needed. For information on the PA tabs, see FileNet P8 Administration > Enterprise-wide Administration > Process Task Manager > Process Analyzer > Configure the Process Analyzer.

- d. Click Apply to save and apply your changes.
- 2. (If PA will use a remote database) Configure the PA database.
 - a. Configure the following service to log on as the *pa_administrator*.

	Location
SQL Server	database server

b. In Process Task Manager, specify the path for the shared Temp directory in UNC format.

This is the directory created in "Create a shared Temp directory" on page 24.

- i. Select the Process Analyzer node and then select the General tab.
- ii. In the Temp Directory (UNC) field, enter the path to the shared Temp directory in UNC format. For example;

\\pa_server\temp

where "pa_server" is the name of the PA Engine server and "temp" is the name of the shared Temp directory you created.

3. Configure the following services to log on as the *pa_administrator*.

	Location
Process Analyzer Services Manager	Process Analyzer Engine
SQL Server Analysis Services	analysis server

- 4. Configure Application Engine.
 - a. Log on to Workplace.

If you defined a Process Engine configuration group on the Security tab of Process Task Manager (when completing the "Configure Process Task Manager" task in the *IBM FileNet P8 Platform Installation and Upgrade Guide*), you must log on as a member of either that group or the Process Engine Administrators Group, which was also defined on the Security tab, in order to complete the following steps.

- b. In Workplace, click Admin and then click Process Configuration Console.
- c. Select the icon of the appropriate VWService and click **Properties** on the toolbar.
- d. On the Runtime Options tab, enable the Process Analyzer.

For details, in Process Configuration Console, see the *IBM FileNet P8 Help* topic Workplace > Admin Tools > Process Configuration Console > VWServices > Modify VWServices Properties > Set runtime options.

- e. Click OK.
- 5. Configure Connection to Process Engine.
 - a. Navigate to Programs > FileNet P8 Platform > Process Analyzer > Process Task Manager from the Windows Start menu.
 - b. Select the **Process Analyzer** node in the left panel.
 - c. Select the Database tab and then the Process Engine Database sub tab.

Enter or verify the following information. For more information on how to fill out these fields, see the *IBM FileNet P8 Help* topic FileNet P8 Administration > Enterprise-wide Administration > Process Task Manager > Configure Process Analyzer > Database properties.

NOTE If you selected "simulation data" in "Specify Process Analyzer Usage" on page 37 to configure this installation of PA for analysis of simulation data only, instead of actual database values you can enter dummy values for the following fields.

- Database Type The type of database that PE is using.
- Database Host The name of the server where the PE database is installed. In the case of a clustered database server, enter the virtual server name.
- Database Port The port used by the PE database.
- Database Name The name of the PE database.

- Database User Name The P8 user name used to connect to the database. For PA you should use *PEDatabaseUserNameForPA* defined in "To create users required at runtime" on page 25.
- Database Password The password associated with the *PEDatabaseUserNameForPA* user.
- JDBC Driver Name The name of the JDBC driver used to access the PE database.
- JDBC Driver Classpath The location of the JDBC JAR files used by the JDBC driver.
- d. Select the **General** tab, and configure the following parameters for the connection to Content Engine:
 - Content Engine URI
 - Service username
 - Service password

NOTE If you selected "simulation data" in "Specify Process Analyzer Usage" on page 37 to configure this installation of PA for analysis of simulation data only, instead of actual database values you can enter dummy values for these fields.

For more information about these fields, see the *FileNet P8 Help* topic FileNet P8 Administration > Enterprise-wide Administration > Process Task Manager > Configure Process Analyzer > General properties, and look for the table entry Database User Name.

- e. (Optional) Select the Event Logs tab, and configure the regions or event logs from which PA will process events:
 - Process all events Select this to process events from all available regions. This is the default setting.
 - Process events from specific regions and event logs Select this to process events from one or more regions, then select the regions to process from the Region field below.

CAUTION After you configure PA to process events from specific regions, you cannot undo this selection by selecting Process all events. However, you can configure PA to process all events by selecting <All EVENT LOGS> for every region.

For more information, see the *IBM FileNet P8 Help* topic FileNet P8 Administration > Enterprise-wide Administration > Process Task Manager > Configure Process Analyzer > Event Logs.

- f. Click Apply to save your changes.
- g. Click Data Fields in the feature panel for PA Engine.
- h. Click **Connect** to test the connection to Process Engine and Content Engine. If the connection fails here, verify the values entered above.

NOTES

- This does not test the connection to the Process Engine database.
- The Connect button is not enabled if PA is already running.

6. Start the Process Analyzer services from the Process Task Manager by right-clicking **Process Analyzer** and selecting **Start**.

Task 6: Install Process Analyzer Client

PA client software consists of out-of-the-box reports and templates. You can install PA client in a single location that multiple end users will access or on each end user workstation. The determining factors should be the number of end users who will access the reports and the sophistication of the end users.

To install prerequisite software

All PA Client machines and all end user workstations that will access the out-of-the-box reports or that will create reports must have:

• Microsoft Excel with query analyzer (MS Query) and pivot table support installed.

For Excel version requirements, see the *IBM FileNet P8 Hardware and Software Requirements*. See Microsoft documentation for instructions on how to install and configure Microsoft Excel.

- SQL Server add-ons:
 - Microsoft Core XML Services (MSXML) 6.1
 - Microsoft SQL Server 2005 Analysis Services 9.0 OLE DB Provider.

NOTE These add-ons are available for download from Microsoft. For details, see *IBM FileNet P8 Hardware and Software Requirements*.

To grant access rights to the Process Analyzer OLAP database

Before anyone can use the system, you must grant access to the PA OLAP database. Use the Microsoft SQL Server Management Studio to create roles and assign users. See "pa_client_database_user" on page 27 and the online help for the SQL Server for more information and detailed instructions.

CAUTION Use this procedure only as a guide to creating roles because each site's security requirements differ.

- 1. Log on to the PA analysis server as the user with administrative rights on SQL Server.
- 2. (If the analysis server and PA Client server do *not* belong to the same domain) Create a duplicate of the client user on the analysis server.

Using the local user management tool, create a user with the same name and password as the user that will log on to the PA Client server.

- 3. Grant access rights to the Process Analyzer OLAP database
 - a. Go to Start > Programs > Microsoft SQL Server 2005 > SQL Server Management Studio.
 - b. Connect to your analysis services instance.
 - c. Expand Databases > OLAP_database_name.

NOTE If you are using the default instance, no instance name is appended.

d. Right-click Roles and select New Role....

- e. Give the user access to the OLAP cubes.
 - i. Enter the following information:
 - Role Name Give a descriptive name for the role.
 - Description Describe how the role will be used.
 - ii. Set the database permissions for this role to be Full control (Administrator).
 - iii. Select the Membership tab.
 - iv. Click Add.
 - v. Select one of the following in the Add Users and Groups dialog box:
 - The local user you just created.
 - A domain user or group of users used to log on to the PA Client server.
 - vi. Click Add.

NOTE If you want to add more than one user or group, you must add them separately by repeating Step iv through Step vi.

- vii. Click OK.
- viii. Click OK.

To install Process Analyzer Client software silently

A sample response file for the PA Client installation is located on the installation media in the PA Client directory. The filename is PA_silent_install.txt.

NOTE If you are installing a localized Japanese client, you must use the client installer and response file located in the /PA Client/Japanese folder.

To run silent install, change directories to the temporary location for the contents of the PA Client directory. Verify that the response file is in that directory.

Execute the following command at a command prompt:

P8PA-4.5.0-Client.exe -silent -options responseFileName

where the responseFileName is the .txt file containing the responses you want to use for the installation.

When the installation is complete, check the log files to verify that the installation was successful.

To install and Configure Process Analyzer Client software interactively

1. Access the IBM FileNet Process Analyzer 4.5 software package.

Launch the installation program (PA-4.5.0-Client.exe, located in the PAClient directory) to start the installation process.

NOTE If you are installing a localized client, you must use the localized client installer located in the /PA Client/ folder.

For information on parameter values, see "Installation and upgrade worksheet" on page 69.

HINT With the **Data > Filter > AutoFilter** command enabled, as it is by default in the shipping worksheet file (p8_worksheet.xls), perform the following steps to quickly see only the installation properties you must specify for the Process Analyzer Client installation program:

- Click the AutoFilter drop-down arrow in the "Installation or Configuration Program" column header and select PA Client installer.
- Click the AutoFilter drop-down arrow in the "Setup Type" column header, select Custom, and specify: Setup Type contains "Installation."

	Perform this action
License Agreement	Review and accept the license agreement.
Specify Installation Location	Choose the destination drive and directory for PA Client software.
Specify the Documentation URL	Enter the Documentation URL, which is where the FileNet P8 Platform Documentation was installed. Your entry must be in the following format:
	http://docserver:port#/ecm_help
	where:
	• <i>docserver</i> is the name of the Java web server.
	• <i>port#</i> is the port number.
	 ecm_help is the root folder of the documentation website. You can use multi-part root folders (e.g., /docs/ecm_help) if your application server supports them.
Installation Summary	Read and verify the installation summary information. Click Install if the information is correct, or click Back to make changes.
Complete the Installation	When the installation is complete and the selected software has been started, click Finish to exit the installation program.

NOTE If you are performin an upgrade, make sure the Setup Type contains "Upgrade."

2. Configure the PA Client.

NOTES

• If you are logged in as a user that is not an *pa_client_database_user*, you must now log out, and then log back in as a *pa_client_database_user* before you proceed.

• Instead of storing the reports on each individual server, you can make them available to remote workstations by sharing the drive where the reports are located on the network, saving the reports to a network drive, or saving the reports to an object store.

If you take one of these actions, you must:

- Verify that the prerequisite software is installed on each end-user's workstation. See "To install prerequisite software" on page 47 for details.
- Point the end users to the location of the reports.
- Point the end users to the Process Analyzer User Guide. See the IBM FileNet P8 Help topic Expansion Products > Process Analyzer > Process Analyzer User Guide (also available on the client server by navigating to Start > Programs > FileNet P8 Platform > Process Analyzer > Process Analyzer User Guide).
- (If you need to start the configuration tool after you log on as a pa_client_database_user) From the Start menu, navigate to Programs > FileNet P8 Platform > Process Analyzer > Process Analyzer Client Configuration Tool.
- 4. Enter the name of the Process Analyzer Analysis Server where the PA OLAP database is located.

Depending on whether the PA Engine has a local or remote OLAP database, your entry is the name of:

• the server where the PA Engine software was installed

or

- the remote OLAP database server used by the PA Engine
- 5. Enter the Database Name for Process Analyzer Analysis Services.

Enter the OLAP database name.

6. Enter the Analysis Services Instance Name.

NOTE This field requires a value only when installing on SQL Server 2005 with a non-default Analysis Service. If you are installing on SQL Server 2005 with the default instance you can leave the field empty.

7. Verify that the folder where you store your reports is listed in the Root Report Folder field.

NOTE By default, the field contains the location where installation installed the out-of-the-box reports. If your reports are stored in another folder, enter the path to this folder here.

8. Click Configure.

The Client Configuration Tool configures the out-of-the-box reports by configuring the data connection in all Excel spreadsheets in all folders one level below the indicated folder. The progress of the configuration appears in the Results box.

NOTE Following configuration, on the PA client machine you can view and modify the sample reports or create new reports. For details, see the *IBM FileNet P8 Help* topic Expansion Products > Process Analyzer > Process Analyzer User Guide (also available on the client server by

navigating to Start > Programs > FileNet P8 Platform > Process Analyzer > Process Analyzer User Guide).

9. Select **File > Exit** to close the Client Configuration Tool.

Task 7: Install Process Analyzer software updates

Perform the procedure in this topic for each Process Analyzer instance to install software updates (mod release, fix pack, or interim fix).

To install the Process Analyzer software updates

- 1. To obtain the latest Process Analyzer software updates, and to determine whether additional interim fixes are needed, contact your service representative.
- 2. Open the readmes for the Process Analyzer software updates and perform the installation procedures in the readmes on each Process Analyzer instance.

Plan and prepare for upgrade

This section, Plan and Prepare for Installation, provides instructions for preparing your system to upgrade IBM FileNet Process Analyzer.

Plan the Upgrade

This section lists details that will help you prepare your environment for the upgrade of FileNet PA. In many cases, the items you see listed will be links to more detailed information, which will help you plan a system upgrade. Review this information thoroughly before you start to upgrade FileNet PA or required third-party software.

NOTE The upgrades described in this guide assume that you will retain your basic platform configuration from the previous release.

Gather auxiliary documentation.

For a list of required documentation, see "About IBM FileNet documentation" on page 12.

Supported Upgrade Paths

- See the *IBM FileNet P8 Hardware and Software Requirements* document for the version numbers of product platforms supported for use with FileNet PA 4.5.
- Before you upgrade your FileNet software, update your independent software vendor (ISV) software to the patch and Service Pack levels that FileNet supports.

Configure Process Analyzer to process events from specific isolated regions or event logs

If you intend to use the new functionality where PA can process events from specific isolated regions or event logs, complete the PA software and database upgrades as indicated in this document, and then configure the regions or event logs from which PA will process events using the instructions in "Configure Connection to Process Engine." on page 44.

For more information, see the *IBM FileNet P8 Help* topic FileNet P8 Administration > Enterprise-wide Administration > Process Task Manager > Configure Process Analyzer > Event Logs.

Perform Required Preparation Tasks

ATTENTION In addition to the preparation tasks listed below, follow the plan and prepare instructions in the *Plan and Prepare Your Environment for IBM FileNet P8* document for the components you are installing.

To prepare your environment for a Process Analyzer installation

Perform the required preparation tasks for the components you plan to install:

- "Installation Administrator Tasks" on page 55
- "IT Administrator Tasks" on page 56
- "Security Administrator Tasks" on page 57
- "Database Administrator Tasks" on page 57

In addition, if you are using the Installation and Upgrade Worksheet for your environment, all administrators should fill out the worksheet with the relevant information as described in "Installation and upgrade worksheet" on page 69.

Installation Administrator Tasks

The items below are the required tasks for the Application Installer Administrator.

Verify supporting software

Verify the core platform components support levels.

PA requires that the three core platform components, Content Engine (CE), Process Engine (PE), and Application Engine (AE), have been upgraded and configured before starting the PA upgrade.

For more information, see the IBM FileNet P8 Hardware and Software Requirements.

- You must upgrade the FileNet P8 Platform core components: Content Engine (CE), Process Engine (PE), and Application Engine (AE), before you upgrade PA.
- You must upgrade PA before you upgrade Process Simulator (PS).
- You can upgrade to FileNet PA 4.5 from PA version 3.5.2 and 4.0.1.

CAUTION Apply the required minimum level of FileNet PA patches to the currently installed software before you upgrade. FileNet patches and fix packs often include feature updates that are required to ensure a successful upgrade. Therefore, before you begin your upgrade to FileNet PA 4.5, you must have applied the minimum level of fix packs to your installed 4.0.1 components. For more details, see *IBM FileNet P8 Hardware and Software Requirements*.

Verify that your PA version supports upgrades to version 4.5.

See "Supported Upgrade Paths" on page 53. For further details, see the *IBM FileNet P8 Hardware* and *Software Requirements*.

FileNet P8 Platform Documentation URL

If you have an existing application server in place with a FileNet P8 Platform Documentation web site established, you can determine its URL by checking the Documentation server site preference in Workplace.

IT Administrator Tasks

The items below are the required tasks for the Information Technology (IT) administrator.

Ensure minimum required disk space and temp space for installation

See the IBM FileNet P8 4.5 Hardware and Software Requirements.

Back up the PA Engine

Make sure the site has restorable backups of the system and data for all PA and Process Engine components. In case of an emergency, you might need to back out of the upgrade. For details on what to back up for FileNet P8 components, see the *IBM FileNet P8 Help* topic FileNet P8 Administration > Back up and Restore FileNet P8.

Back up the following items.

- The database used by Process Engine that this PA Engine is connected to.
- The VMAEDM database
- The analyzer.properties file (Default location:C:\Program Files\filenet\Process Analyzer Engine\jpa).
- The VMAE OLAP database. Make a note of any special configuration that has been applied to cubes or dimensions, such as role assignments or auto-grouping. The configuration must be reapplied after the upgrade is complete. See the online help for the Analysis Manager for information and detailed instructions on creating roles and assigning users.

Disable scheduled tasks on the PA server

- Scheduled automated backups
- Virus scanning

Security Administrator Tasks

The items below are the required tasks for the Security Administrator.

NOTE Process Analyzer upgrades don't require any actions by the Security Administrator.

Database Administrator Tasks

The items below are the required tasks for the database administrator.

Verify Oracle listener

(If PE uses an Oracle database) Verify that the Oracle listener is running on the PE database server.

Gather database information

- Note your current Database Instance Names, NLS, and character set configurations.
- Note the dedicated TCP/IP port number of the SQL Server database instance that PA Engine will use.

NOTE To determine the TCP/IP port number, open SQL Server Enterprise Manager and display the database instance properties. Click **Network Configuration** on the **General** tab. Select **TCP/IP** in Enabled protocols and click **Properties**.

Upgrade SQL Server 2000 to version 2005

- 1. Back up the upgraded PA database (VMAEDM).
- 2. Upgrade SQL Server 2000 to version 2005.

NOTE You can perform this step any time after installing PA Engine. This version of PA Engine runs on both MS SQL 2000 and MS SQL 2005. You might want to verify the functionality of the updated PA Engine before upgrading the database.

- a. Stop Process Analyzer software, if running.
- b. Follow Microsoft instructions to upgrade the database from SQL Server 2000 to SQL Server 2005.

CAUTION When upgrading a named instance of SQL Server don't select to upgrade Analysis Services on the Components to Install screen. To upgrade the default instance of Analysis Services used by Process Analyzer you must run the SQL Server 2005 setup a second time, this time selecting to upgrade the default instance and choosing the Analysis Services component.

- c. Download and install the Microsoft SQL Server 2005 JDBC driver.
- d. Delete the existing Process Analyzer OLAP database.
 - i. Go to Start > Programs > Microsoft SQL Server 2005 > SQL Server Management Studio.

- ii. Connect to the Analysis Services instance used.
- iii. Expand Databases.
- iv. Right click the OLAP database (VMAE_db_instance_name) and select Delete.NOTE If you are using the default instance, no instance name is appended.
- v. Click **OK** to delete the database.
- e. Rebuild the OLAP database and update the PA configuration
 - i. Open a command prompt
 - ii. Change directories to:
 - C:\Program Files\FileNet\Process Analyzer Engine\jpa\scripts\sqlserver\2005
 - iii. Run the script upgradeconfig.bat.
 - iv. The upgradeconfig script will display a dialog. Enter the Microsoft SQL Server 2005 JDBC classpath and click **OK**.
- 3. Reapply any special configuration that has been applied to cubes or dimensions, such as role assignments or auto-grouping.
- 4. (Optional) Reprocess the OLAP cubes.

This optional operation will provide you with the OLAP report data before the next scheduled run of the report. Note that this operation could take a long time. IBM FileNet recommends that you perform it during periods of low usage.

- On the PA server, navigate to Start > Programs > FileNet P8 Platform > Process Analyzer > Process Task Manager.
- Start the Process Analyzer services from the Process Task Manager by right-clicking Process Analyzer and selecting Start.
- c. Right-click the Process Analyzer node again and select Process Cubes.
- d. Click Yes to confirm that you want to proceed with the reprocessing.

Upgrade and configure Process Analyzer

This upgrade section contains the following major topics:

- Task 1 "Upgrade Process Analyzer documentation" on page 60
- Task 2 "Upgrade Process Analyzer Engine" on page 61
- Task 3 "Upgrade Process Analyzer Client" on page 63
- Task 4 "Install Process Analyzer software updates" on page 64

Task 1: Upgrade Process Analyzer documentation

Process Analyzer is an expansion product of IBM FileNet P8 Platform; therefore you must add the associated PA documentation to an existing installation of the IBM FileNet P8 Platform Help. This action makes PA help available to your users and enables context-sensitive help from the product user interface.

For details and instructions on installing expansion product documentation, see the latest IBM FileNet P8 4.5 version of the *IBM FileNet P8 Platform Installation and Upgrade Guide.* Pay special attention to the "Install expansion product documentation" subtopic in the "Install IBM FileNet P8 documentation (*your application server*)" task.

CAUTION You can install only the 4.5 version of PA documentation on an existing IBM FileNet P8 Platform 4.5 documentation server.

Task 2: Upgrade Process Analyzer Engine

To upgrade Process Analyzer Engine

- 1. Verify that the FileNet P8 Platform core components (CE, PE, AE) are running.
- 2. Verify that the PA Engine database is running.
- 3. Log on as the *pa_install_user*, as defined in "To create users required for Process Analyzer installation" on page 25.
- 4. Verify that the existing Process Analyzer software is not running.
- 5. Access the IBM FileNet Process Analyzer 4.5 software package.
- 6. Launch the installation program (P8PA-4.5.0-Engine.exe, located in the PAEngine directory) to start the installation process.

For information on parameter values, see "Installation and upgrade worksheet" on page 69.

HINT With the **Data > Filter > AutoFilter** command enabled, as it is by default in the shipping worksheet file (p8_worksheet.xls), perform the following steps to quickly see only the installation properties you must specify for the Process Analyzer installation program:

- Click the AutoFilter drop-down arrow in the "Installation or Configuration Program" column header and select PA installer.
- Click the AutoFilter drop-down arrow in the "Setup Type" column header, select Custom, and specify: Setup Type contains "Upgrade."

In this screen	Perform this action
License Agreement	Review and accept the license agreement.
Detected FileNet BPM Software	Click Next to stop the software components and continue with the installation.
Specify the E Documentation URL F f	Enter the Documentation URL, which is where the FileNet P8 Platform Documentation was installed. Your entry must be in the following format:
	http://docserver:port#/ecm_help
	where:
	• <i>docserver</i> is the name of the Java web server.
	• <i>port#</i> is the port number.

• *ecm_help* is the root folder of the documentation website.

In this screen	Perform this action
Content Engine API Configuration	Enter the Content Engine Client Software URL.
	For example:
	WebSphere
	http://hqcemp2:9080/wsi/FNCEWS40DIME
	WebLogic
	http://hqcemp1:7001/wsi/FNCEWS40DIME
	JBoss
	http://hqcemp3:8080/wsi/FNCEWS40DIME
Installation Summary	Read and verify the installation summary information.
	Click Install if the information is correct, or click Back to make changes.
Complete the Installation	When the installation is complete and selected software has been started, click Finish to exit the installation program.
	NOTES If the installer detects that a reboot is required, click Next to continue the installer wizard.
System reboot prompt	If the installer prompts you for a system reboot, select Yes , restart my computer to reboot automatically after the installer completes. Select No , I will restart my computer at a later time if you plan to reboot your system manually.

7. Check for errors in the Process Analyzer error log files at:

C:\Program Files\FileNet\PAInstalllog.txt

C:\Program Files\FileNet\PAServiceInstalllog.txt

- 8. Perform "Install the latest Content Engine Client files on Process Analyzer server" on page 40.
- 9. Perform "Install the latest Process Engine Client files on Process Analyzer server" on page 42.
- 10. Upgrade the PA database.
 - a. On the PA server, launch Process Task Manager.
 - b. A dialog will display, stating that a database upgrade is required.
 - c. Follow the dialog's prompts to upgrade your database.

Task 3: Upgrade Process Analyzer Client

For software requirements for the PA Client and third party tools such as MS Excel, see the *IBM FileNet P8 Hardware and Software Requirements* document.

To upgrade Process Analyzer Client

1. Backup reports.

Before you uninstall the previous client you should create backup copies of your existing custom reports that are stored in the default path (the installation location you selected when installing the PA Client). All files in this path will be overwritten by the client installer.

Default: C:\Program Files\FileNet\Process Analyzer Client\ootbreport

- 2. Uninstall PA Client.
 - a. On the PA client server, navigate to Start > Settings >Control Panel and then double-click Add/Remove Programs.
 - b. Select the FileNet Process Analyzer Client application from the list of installed programs and click Change/Remove.
 - c. Click Yes to confirm you want to remove the PA Client application.
 - d. Click **OK** when the Uninstall program is finished.
 - e. Close the Add/Remove Programs snap-in.
 - f. Close the Control Panel.
- 3. Install PA Client version 4.5
 - a. To install PA Client, follow the instructions in Task 6 "Install Process Analyzer Client" on page 47.
 - b. To install required FileNet PA 4.5 software updates, follow the instructions in "Install Process Analyzer software updates" on page 52.

Task 4: Install Process Analyzer software updates

Perform the procedure in this topic for each Process Analyzer instance to install software updates (mod release, fix pack, or interim fix).

To install the Process Analyzer software updates

- 1. To obtain the latest Process Analyzer software updates, and to determine whether additional interim fixes are needed, contact your service representative.
- 2. Open the readmes for the Process Analyzer software updates and perform the installation procedures in the readmes on each Process Analyzer instance.

Remove software

This section presents steps for removing PA Engine and PA Client.

To remove Process Analyzer Engine

- On the PA Engine server, navigate to Start > Settings > Control Panel and double-click Add/ Remove Programs.
- 2. Select the FileNet Process Analyzer Engine application from the list of installed programs and click Change/Remove.
- 3. Click Next at the Welcome screen.
- 4. Click Next to stop the FileNet BPM software and continue with the wizard.
- 5. Click Next when you see the list of software components to be removed.
- 6. Click Yes to remove the PE Help URL, taskman.properties, and analyzer.properties files.
- 7. Click Finish to exit the wizard.

NOTE Depending on the state of the system, you might be prompted to restart the computer in order to complete the uninstall process. Click **Finish**.

- 8. Close the Add/Remove Programs snap-in.
- 9. Close the Control Panel.
- 10. Purge the PE database of PA entries.

To complete the uninstallation of Process Analyzer from your system, you must manually delete all rows related to the Process Analyzer from the Process Engine database VWPAEventState table. This allows Process Engine to purge all Process Analyzer entries from its database.

- a. Log on to the Process Analyzer database server.
- b. Using your RDBMS software, open the X_Config table in the Process Analyzer database and locate the PAId entry for the Process Analyzer server you are uninstalling.
- c. Log on to the Process Engine database server as a local user with administrator privileges.
- d. Using your RDBMS software, open VWPAEventState table in the Process Engine database and delete all rows where the value of the F_PAId column matches the PAId value for the Process Analyzer server you are uninstalling.

To remove Process Analyzer Client

- On the PA Client server, navigate to Start > Settings >Control Panel and then double-click Add/ Remove Programs.
- 2. Select the FileNet Process Analyzer Client application from the list of installed programs and click Change/Remove.

- 3. Click Yes to confirm you want to remove the PA Client application.
- 4. When the Uninstall program is finished, click **OK**.
- 5. Close the Add/Remove Programs snap-in.
- 6. Close the Control Panel.

Appendixes

The appendixes section contains the following major topics:

- "Encrypt Passwords for silent installations and upgrades" on page 68.
- "Installation and upgrade worksheet" on page 69.

Encrypt Passwords for silent installations and upgrades

You can use resource-input files to install and upgrade IBM FileNet Process Analyzer components silently, as well using interactive installation programs, as noted throughout this guide.

The *TextForDBPassword* password connected with the *TextForDBUser* is required to silently install FileNet P8 Process Analyzer Engine. This password must be encrypted before you enter it in the silent installation resource files. Use the *pa_db_administrator* user when configuring this user and password.

To encrypt the password

1. The encryption tool is located on the installation media for Process Analyzer software, in the PAEngine directory. Copy the following file from this directory to a local drive:

fnencryptutils - an executable JAR file

2. To invoke the application, execute the following command:

java -cp fnencryptutils.jar filenet.vw.FNEncrypt.apps.FNEncryptApp

- 3. Enter the appropriate values for the user name and password.
- 4. Reenter the password to confirm it.
- 5. Click Generate.
- 6. An encrypted password will be generated and displayed in the encrypted password field.
- 7. Copy and paste this password into the appropriate silent installation resource file.

Installation and upgrade worksheet

The Installation and Upgrade Worksheet is a comprehensive spreadsheet that contains properties, parameters, and field names for installation, upgrade, and initial configuration of P8 Platform components and add-on products. Administrators who are preparing the environment for installation or upgrade of IBM FileNet P8 Platform can use the worksheet during their preparation tasks to record the appropriate values and provide them to the administrator who will run the installation or upgrade.

You can access the worksheet through the following link:

Installation and Upgrade Worksheet

or on the IBM product documentation page. To download this and other IBM FileNet product documentation from the IBM web site, see "Access IBM FileNet documentation, compatibility matrices, and fix packs" on page 10.

Worksheet organization

Review the following considerations about the organization of the worksheet:

- The two highlighted columns, "Property or Parameter" and "ENTER YOUR VALUE HERE", provide the simplest view of the requirement. The others add clarifying information and help you sort the rows usefully.
- For descriptions of the non-obvious properties and parameters in the worksheet, see the installation glossary in the *Plan and Prepare Your Environment for IBM FileNet P8* document.
- The "Role" column uses the following acronyms for Administrator roles:
 - TA: Information Technology Administrator
 - ASA: Application Server Administrator
 - DBA: Database Administrator
 - SA: Security Administrator

Optimizing the worksheet

The worksheet provides all possible properties, parameters, and field names for installation, upgrade, and initial configuration of P8 Platform components as well as add-on products. Only a small subset of these rows will apply to a particular installation or administrator role as part of that installation. For example, a database administrator who is only working with DB2 can receive a smaller spreadsheet with rows that have been sorted for the Admin Role of DBA, and the independent software vendor of DB2.

You may receive a simplified or more focused variation of this spreadsheet that is appropriate to your environment or role. Work with your install team and your IBM services representative to make the best use of this tool.

HINT With the **Data > Filter > AutoFilter** command enabled, as it is by default in the shipping worksheet file (p8_worksheet.xls), perform the following actions to quickly see only the installation properties you must specify for a given installer or configuration program:

- Click the **AutoFilter** drop-down arrow in the "Installation or Configuration Program" column header and select the program you are interested in (for example, PA installer).
- Click the AutoFilter drop-down arrow in the "Setup Type" column header, select Custom, and specify: Setup Type contains "Installation."
- Click the AutoFilter drop-down arrow in all other column headers and select (All).

Index

С

configuration grant access rights in Analysis Manager 47 PA database 43 Process Analyzer 43 Process Engine connection 44

D

database VMAE (OLAP) 28 VMAEDM (PA) 28 database connection 33 documentation server URL 36, 49, 61 upgrade 60

F

Fix Packs 52, 64

L

install non-english environments 22 installation documentation 35 Microsoft SQL Server 2005 29 Microsoft SQL Server JDBC 2005 1.2 driver 31 Process Analyzer Client 47 Process Analyzer Engine 36 Service Packs and Fix Packs 52, 64 silent Process Analyzer Client 48 Process Analyzer Engine 39

L

localization available languages 23 non-english environments 22

Μ

Microsoft SQL Server 2005 29

0

OLAP database 28

Ρ

PA database 28 planning installation 18 ports 24 Process Engine connection 44

R

requirements database 28 Microsoft SQL Server JDBC 2005 1.2 driver 31 ports 24 Process Analyzer 22 Process Analyzer Client 47 server time synchronization 24 users 25

S

Service Packs 52, 64 silent install Process Analyzer Client 48 Process Analyzer Engine 39 supported upgrade paths 53

U

upgrades database 62 supported paths 53 use cases 22 users 25

V

VMAE (OLAP) database 28 VMAEDM (PA) database 28
Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive Armonk, NY 10504-1785 U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation Licensing 2-31 Roppongi 3-chome, Minato-ku Tokyo 106-0032, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation J46A/G4 555 Bailey Avenue San Jose, CA 95141-1003 U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol ([®] or TM), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other company, product, and service names may be trademarks or service marks of others.

IBM FILENET PROCESS ANALYZER INSTALLATION AND UPGRADE GUIDE

IBM.®

Program Number: 5724-R76

Printed in USA

GC31-5608-01

